

## ABSTRACT OF THE DISCLOSURE

Multiple voice channels are aggregated into a packet having a segmented data structure and sent over a packet network. The segmented data structure includes segment IDs, corresponding data segments and a packet header arranged so that all data is aligned on 8-byte boundaries for efficient processing by 64-bit processors. The data segment represents one or more milliseconds of digitized voice data, and the segment ID explicitly identifies the voice channel associated with the digitized voice data without reference to any other data in the data structure.